

AMENDMENTS TO THE CLAIMS

The Assignee submits below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Previously presented) A computing system supporting network selection based upon network information spanning multiple communication media, the system comprising:
 - a rules data store for maintaining network selection criteria;
 - a media specific module interface for providing accumulated network interface information spanning multiple communication media, the accumulated network interface information being associated with a set of networks and a set of network interfaces, each network interface for connecting the computing system to a network in the set of networks;
 - a rules engine, comprising at least one processor, for designating one of the set of networks by applying a network selection criterion from the rules data store to the accumulated network interface information spanning multiple media; and
 - a plurality of media specific modules configured to acquire network interface information pertaining to network interfaces associated with particular media types, and to receive network interface configuration commands, from the rules engine, to connect to one of the set of networks, each of the media specific modules configured to acquire network interface information from media specific drivers associated with particular interfaces,wherein the media specific module interface comprises a normalization module that converts standardized communication requests it receives from the rules engine into media specific communications that meet media specific implementation requirements, the normalization module further configured to direct the media specific communications to respective network interfaces.
2. (Previously presented) The computing system of claim 1 wherein the rules engine has access to the rules data store.

3-4. (Canceled)

5. (Previously presented) The computing system of claim 1, further comprising a plurality of media specific drivers, each of the drivers associated with a particular network interface.

6-7. (Canceled)

8. (Original) The computing system of claim 1 wherein the network selection criterion specifies a preference order between at least two media based upon a network parameter associated with the media.

9. (Original) The computing system of claim 1 wherein the network selection criterion specifies a preference order between at least two media based upon a network type associated with the media.

10. (Original) The computing system of claim 1 wherein the network selection criterion specifies a preference order based upon a current location of the computing system.

11. (Original) The computing system of claim 1 wherein the network selection criterion specifies a preference order between logical networks.

12. (Previously presented) The computing system of claim 1 wherein the network selection criterion specifies a preference order based upon a network time of use parameter.

13. (Previously presented) The computing system of claim 1 wherein the rules engine is incorporated into a state machine that cyclically scans a set of network interfaces for networks, applies the network selection criterion to a set of networks and interfaces to render a current

network and interface selection, and issues configuration instructions in accordance with the current network and interface selection.

14-15. (Canceled)

16. (Currently amended) The method of claim [[15]] 50 wherein the network selection criterion is accessed from a configurable rules data store.

17. (Currently amended) The method of claim [[15]] 50 further comprising issuing network interface configuration ~~instructions~~ commands in accordance with the designating step.

18. (Currently amended) The method of claim [[15]] 50 wherein the media specific modules are each associated with at least one distinct type of communication media driver.

19-20. (Canceled)

21. (Currently amended) The method of claim [[15]] 50 wherein the network selection criterion specifies a preference order between at least two media based upon a network parameter associated with the media.

22. (Currently amended) The method of claim [[15]] 50 wherein the network selection criterion specifies a preference order between at least two media based upon a network type associated with the media.

23. (Currently amended) The method of claim [[15]] 50 wherein the network selection criterion specifies a preference order based upon a current location of the computing system.

24. (Currently amended) The method of claim [[15]] 50 wherein the network selection criterion specifies a preference order between logical networks.

25. (Currently amended) The method of claim [[15]] 50 wherein the network selection criterion specifies a preference order based upon a network time of use parameter.

26. (Currently amended) The method of claim [[15]] 50 wherein the designating comprises evaluating in a rules engine at least one of the network selection criteria based on the accumulated network interface information, and the method further comprises cyclically performing, under the control of a state machine: scanning a set of network interfaces for networks; applying, with the rules engine, the network selection criterion to a set of networks and interfaces to render a current network and interface selection; and issuing configuration instructions in accordance with the current network and interface selection.

27-28. (Canceled)

29. (Currently amended) The computer-readable medium of claim [[28]] 51 wherein the network selection criterion is accessed from a configurable rules data store.

30. (Currently amended) The computer-readable medium of claim [[28]] 51 wherein the computer-executable instructions further facilitate issuing network interface configuration instructions in accordance with the designating step.

31. (Canceled)

32. (Currently amended) The computer-readable medium of claim [[28]] 51 further comprising computer-executable instructions for acquiring, by the media specific modules, network interface information from the communication media drivers associated with particular network interfaces.

33. (Canceled)

34. (Currently amended) The computer-readable medium of claim [[28]] 51 wherein the network selection criterion specifies a preference order between at least two media based upon a network parameter associated with the media.

35. (Currently amended) The computer-readable medium of claim [[28]] 51 wherein the network selection criterion specifies a preference order between at least two media based upon a network type associated with the media.

36. (Currently amended) The computer-readable medium of claim [[28]] 51 wherein the network selection criterion specifies a preference order based upon a current location of the computing system.

37. (Currently amended) The computer-readable medium of claim [[28]] 51 wherein the network selection criterion specifies a preference order between logical networks.

38. (Currently amended) The computer-readable medium of claim [[28]] 51 wherein the network selection criterion specifies a preference order based upon a network time of use parameter.

39. (Currently amended) The computer-readable medium of claim [[28]] 51 wherein the computer-executable instructions comprises a rules engine for evaluating at least one of the network selection criteria based on the accumulated network interface information, and further comprising computer-executable instructions for cyclically performing, under the control of a state machine: scanning a set of network interfaces for networks; applying, with the rules engine, the network selection criterion to a set of networks and interfaces to render a current network and interface selection; and issuing configuration instructions in accordance with the current network and interface selection.

40. (Canceled)

41. (Previously presented) The computing system of claim 1 wherein:
the rules data store maintains network selection criteria acquired from a plurality of sources,
and
the plurality of sources of the network selection criteria comprise a user interface and a
group policy service.

42. (Previously presented) The computing system of claim 41 wherein the sources
network selection criteria are acquired from include a provisioning service.

43. (Canceled)

44. (Currently amended) The method of claim [[28]] 51 wherein the plurality of sources
of the network selection criteria are acquired from include a provisioning service.

45. (Previously presented) The computing system of claim 1, wherein the scanning
engine increases the scanning delay period when the plurality of previous scans indicate there is no
change in state.

46. (Previously presented) The computing system of claim 1, wherein the scanning
engine performs a scan when the plurality of previous scans indicate movement of the computing
system.

47. (Previously presented) The computing system of claim 46, wherein the scanning
engine determines the computing system is moving based on at least one of received signal strength,
retransmission counts, or frame error rates.

48. (Previously presented) The computing system of claim 1, wherein the scanning
engine is configured to detect a network interface to be scanned is sending traffic, and when said

network interface is sending traffic, the scanning engine analyzes statistics for the traffic sent to determine whether a scanning period is to be skipped.

49. (Currently amended) The computer-readable medium of claim [[28]] 51, further comprising:

receiving a notification that a new network interface is available; and

loading another media specific module corresponding to said new network interface, said media specific module configured to request network interface information from a driver for said network interface.

50. (New) A method for selecting a network and interface combination, to which a computing system will initiate a connection via the network interface, based upon network information spanning multiple communication media, the method comprising:

maintaining network selection criteria in a rules data store;

with at least one processor:

accumulating network interface information spanning multiple communication media, the accumulated network interface information being associated with a set of networks and a set of network interfaces, each network interface for connecting the computing system to a network in the set of networks;

at a rules engine, designating one of the set of networks by applying a network selection criterion from the network selection criteria in the rules data store to the accumulated network interface information;

at a plurality of media specific modules, acquiring network interface information pertaining to network interfaces associated with particular media types, the network interface information acquired from media specific drivers associated with particular interfaces;

at the plurality of media specific modules, receiving network interface configuration commands from the rules engine to connect to one of the set of networks;

at a media specific module interface comprising a normalization module, converting standardized communication requests into media specific communications that meet media specific implementation requirements; and

at the media specific module interface, directing the media specific communications to respective network interfaces.

51. (New) A computer-readable medium including computer-executable instructions for facilitating selecting a network and interface combination, to which a computing system will initiate a connection via the network interface, based upon network information spanning multiple communication media, the computer-executable instructions facilitating:

maintaining network selection criteria in a rules data store;

at a plurality of media specific modules, acquiring network interface information pertaining to network interfaces associated with a set of networks and a plurality of media types, the network interface information acquired from media specific drivers associated with particular interfaces, each network interface for connecting the computing system to a network in the set of networks;

at a rules engine, designating one of the set of networks by applying the network selection criteria from the rules data store to the accumulated network interface information;

sending standardized communication requests from the rules engine to a media specific module interface comprising a normalization module, the standardized communication requests related to the designation of the one of the set of networks;

at the normalization module, converting standardized communication requests into media specific communications that meet media specific implementation requirements; and

at the media specific module interface, directing the media specific communications to respective media specific modules.